## **ABSTRACT**

An apparatus and method for web inspection utilize simultaneous capturing of reflected and transmitted light images for real-time merging of same. The reflected light and transmitted light image capturing systems are registered with each other in terms of the down-web and cross-web field being imaged. To allow for the simultaneous acquisition of reflected and transmitted light images, the imaged portion of the web is an unsupported span, and the web is tensioned to prevent sagging. The reflected light and transmitted light image capturing systems each include multiple cameras registered with each other in terms of down-web and cross-web imaging field, and the cameras for the transmitted light image capturing are aligned directly with the light source, which outputs light that is incident on the web at an angle.